REMARKS

Claims 1 to 23 were pending in the Application at the time of examination. The Examiner rejected Claims 1 to 12 under 35 U.S.C. 103(a) as obvious over the Borella reference (US 6,442,603) in view of the Kunitake et al. reference (US 5,991,458). The Examiner rejected Claims 13 to 23 under 35 U.S.C. 103(a) as obvious over the Borella reference (US 6,442,603) in view of the Kunitake et al. reference (US 5,991,458) and further in view of the Pearlman et al. reference (US 5,764,807).

Applicant has cancelled Claims 4, 5, 6, 7, 9, 12, 16, 17, 18, 20, and 23, without prejudice. Applicant has amended Claims 1, 2, 3, 8, 10, and 11, and 13, 14, 15, 19, 21,and 22. Consequently, Claims 1, 2, 3, 8, 10, 11, 13, 14, 15, 19, 21, and 22 remain in the Application.

REJECTION OF CLAIMS 1 TO 12 UNDER 35 U.S.C. 103(a)

The Examiner rejected Claims 1 to 12 under 35 U.S.C. 103(a) as obvious over the Borella reference (US 6,442,603) in view of the Kunitake et al. reference (US 5,991,458).

As shown above, Applicant has cancelled Claims 4, 5, 6, 7, 9 and 12. Consequently, Applicant respectfully submits that the rejection of Claims 4, 5, 6, 7, 9 and 12 is now moot.

With regard to Claim 1, the Examiner stated:

> Borella teaches a method and apparatus for a bandwidth adaptive image compression/decompression scheme comprising:
> -- using a protocol between sender and receiver wherein said protocol calculates

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bandwidth latency of the connection; (Fig. 2; column 4, lines 25-38)

-- choosing a compression scheme based on the results of said protocol; (column 6, line 57 to column 8, line 12)

-- transmitting the most interesting data first; (column 7, line 19 to column 8, line 12)

-- discarding repetitious data; (column 6, line 34 to column 7, line 4; column 7, line 19 to column 8, line 12; In a MPEG coding, there are P and B frames. For P and B frames, only difference data between frames are sent. The repetitious, similar data are not coded and discarded. In a different interpretation, the high order layer of a pyramid is considered as repetitious data of its lower order layer because they represent data at the same locations.)

-- listing the perceptual degradation of said image for various compression schemes; (Table 1; In the right column of Table 1, the lower entry has higher perceptual degradation because less data are transmitted to the receiving side.)...

... However, Borella does not teach the feature of " calculating the perceptual degradation of said image for various compression schemes." Kunitake teaches a method comprising:

-- calculating the perceptual degradation of said image for various compression schemes. (Figs. 4-7; column 18, line 25 to column 19, line 58; Fig. 7 summaries the image quality that inherently indicates perceptual degradation between two encoded image data.)

It is desirable to provide a quality of decoded image as better as possible. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to include Kunitake's dynamic coding method shown in Figs. 4-7 to compress Borella's image data based on detected latency of the connection, because the combination improves better dynamic compression. Obviously the combination also teaches:

-- wherein said step of calculating is supplemented with the results of said protocol.

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As shown above, Applicant has amended Claim 1. Claim 1, as amended, recites, with emphasis added:

> A method and apparatus for a bandwidth adaptive image compression/decompression scheme comprising:
> using a protocol between sender and receiver wherein said protocol calculates bandwidth latency of the connection;
> calculating the perceptual degradation of said image for various compression schemes; and
> **choosing a compression scheme based on the results of said protocol and the results of said calculating the perceptual degradation of said image for various compression schemes.**

Support for the amendment to Claim 1 is found, for example at page 12 line 20 to page 13, line 2 and page 16, line 17 to 22, of Applicant's Specification.

As shown above Applicant's Claim 1, as amended, includes:

> **choosing a compression scheme based on the results of said protocol and the results of said calculating the perceptual degradation of said image for various compression schemes**

Applicant respectfully submits that neither the Borella reference, the Kunitake et al. reference, or any proper combination of the Borella reference and the Kunitake et al. reference discloses, teaches or suggests "choosing a compression scheme based on the results of said protocol and the results of said calculating the perceptual degradation of said image for various compression schemes".

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In light of the discussion above, Applicant respectfully requests the Examiner withdraw the rejection of Claim 1, as amended, and allow Claim 1, as amended, to issue.

Claims 2, 3, 8, 10, and 11, as amended, depend, directly or indirectly, on Claim 1. Consequently, Claims 2, 3, 8, 10, and 11, as amended, include all of the features and limitations of Claim 1, as amended. Therefore, in light of the discussion above, Applicant respectfully requests the Examiner withdraw the rejection of Claims 2, 3, 8, 10, and 11, as amended.

REJECTION OF CLAIMS 13 TO 23 UNDER 35 U.S.C. 103(a)

The Examiner rejected Claims 13 to 23 under 35 U.S.C. 103(a) as obvious over the Borella reference (US 6,442,603) in view of the Kunitake et al. reference (US 5,991,458) and further in view of the Pearlman et al. reference (US 5,764,807).

As shown above, Applicant has cancelled Claims 16, 17, 18, 20 and 23. Consequently, Applicant respectfully submits that the rejection of Claims 16, 17, 18, 20 and 23 is now moot.

With respect to Applicant's independent Claim 13, the Examiner stated:

> The combination of Borella in view of Kunitake, as discussed above, teaches the corresponding method claims 1-12. For Claims 13-23, Borella further teaches a CPU and
>
> a memory that perform the above-discussed methods. (column 3, lines 58-66) Inherently, the CPU has the recited computer program.
>
> However, the combination does not explicitly teach a computer program product as recited in the claims.
>
> Pearlman teaches a computer program product comprising a computer readable medium and a computer program. (Column 2, lines 47-53)

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> It is desirable to make a processing method portable from a computer to another computer. It would have been obvious to one of ordinary skill in the art, at the time of the invention, to store the processing steps of the method taught by Hirano in view of Borella in view of Kunitake in a computer readable medium taught by Pearlman, because the combination makes the processing method portable and therefore increase its application.

As shown above, Applicant has amended Claim 13. Claim 13, as amended, recites, with emphasis added:

> A computer program product comprising:
> a computer usable medium having computer readable program code embodied therein configured to create a bandwidth adaptive image compression/decompression scheme, said computer product comprising:
> computer readable code configured to cause a computer to use a protocol between sender and receiver wherein said protocol calculates bandwidth latency of the connection;
> computer readable code configured to cause a computer to calculate the perceptual degradation of said image for various compression schemes; and
> **computer readable code configured to cause a computer to choose a compression scheme based on the results of said protocol and the results of said calculation of the perceptual degradation of said image for various compression schemes.**

Support for the amendment to Claim 13 is found, for example at page 12 line 20 to page 13, line 2 and page 16, line 17 to 22, of Applicant's Specification.

As shown above Applicant's Claim 13, as amended, includes:

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computer readable code configured to cause a computer to choose a compression scheme based on the results of said protocol and the results of said calculation of the perceptual degradation of said image for various compression schemes.

Applicant respectfully submits that neither the Borella reference, the Kunitake et al. reference, the Pearlman et al. reference, nor any proper combination of the Borella reference, the Kunitake et al. reference and the Pearlman et al. reference discloses, teaches or suggests "computer readable code configured to cause a computer to choose a compression scheme based on the results of said protocol and the results of said calculation of the perceptual degradation of said image for various compression schemes".

In light of the discussion above, Applicant respectfully requests the Examiner withdraw the rejection of Claim 13, as amended, and allow Claim 13, as amended, to issue.

Claims 14, 15, 19, 21 and 22, as amended, depend, directly or indirectly, on Claim 13, as amended. Consequently, Claims 14, 15, 19, 21 and 22, as amended, include all of the features and limitations of Claim 13, as amended. Therefore, in light of the discussion above, Applicant respectfully requests the Examiner withdraw the rejection of Claims 14, 15, 19, 21 and 22, as amended.

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CONCLUSION

For the foregoing reasons, Applicant respectfully requests allowance of all pending claims. If the Examiner has any questions relating to the above, the Examiner is respectfully requested to telephone the undersigned Attorney for Applicant.

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, on February 11, 2005.

Attorney for Applicant — February 11, 2005 Date of Signature

Respectfully submitted,

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